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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/630,454	07/30/2003	Paul J. Holmquist	279.B25US1	9029

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EXAMINER

FAULCON JR, LENWOOD

ART UNIT	PAPER NUMBER
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3762

DATE MAILED: 05/25/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/630,454	Applicant(s) HOLMQUIST ET AL.	
	Examiner Lenwood Faulcon, Jr.	Art Unit 3762	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 16 February 2006.
- 2a) ☐ This action is FINAL.
- 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-39 is/are pending in the application.
4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-39 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

Response to Arguments

1. Applicant's arguments, see page 10 lines 1-4, filed February 16, 2006, with respect to the rejection(s) of claim(s) 1, 15, 19, 22, 23, and 24 under 35 U.S.C. 102(b) have been fully considered and are persuasive. Therefore, the rejection has been withdrawn. However, upon further consideration, a new ground(s) of rejection is made in view of Lebel et al. (U.S. 2002/0049480).

Claim Rejections - 35 USC § 112

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3. Claim 3-5, 16-18, recites limitations that correspond to particular protocols (i.e. Transport Control Protocol, User Datagram Protocol, Transport Control Protocol for transaction). There is insufficient antecedent basis for these limitations in the claim.

4. Claim 33 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Claim 33 has language that claims the "repeater has a wireless connection to the repeater," which is unclear. However, Examiner believes this phrase includes a typo and interprets the limitation to be a repeater in wireless connection to the implantable pulse generator.

Claim Rejections - 35 USC § 102

5. Claims 1-2, 13-15, 23-25 and 32 are rejected under 35 U.S.C. 102(b) as being anticipated by Lebel et al. (U.S. 2002/0049480).

In regards to claim 1, the Lebel et al. reference teaches of a system and method of wirelessly exchanging data by radio frequency telemetry or inductive links (see for examples paragraphs 155 and 420) with an implantable electrical stimulation device (see paragraph 432). Examiner further interprets the implantable device as capable of executing at least one application program that provides data to be exchanged and executing a set of information exchange instructions on the data (see for example paragraph 298). Examiner also takes the position the system as taught by Lebel et al. inherently discloses dividing the data into packets (see for example paragraph 298), in which each packet comprises a preamble, frame sync, telemetry identifier and data which Examiner interprets each component to broadly meet the limitation of header data (see for examples paragraphs 301, 304, 306, 308 and 309) as Lebel et al. teaches that the preamble is capable of providing assistance to an external device in deciphering data (see for example paragraph 301).

In regards to claim 2, Examiner takes the position that Lebel et al. teaches of an external device that receives data packets from the internal device (see for example paragraph 298) and teaches of the use of an op code, a bolus number and an error checking code, all of which can be analyzed by the system and provides information as to the position of the data (see for example paragraphs 308, 309 and 310).

In regards to claims 13-14, Lebel et al. teaches of wireless communication by way radio frequency and inductive links (see for example paragraph 155 and 420).

In regards to claims 15, 25, Examiner takes the position that Lebel et al. anticipates the limitations of these claims for reasons similar to the rejection of claim 1.

In regards to claims 23-24, 32, Examiner takes the position that Lebel et al. anticipates the limitations of these claims for reasons similar to the rejection of claims 13-14.

Claim Rejections - 35 USC § 102/103

6. Claims 3-5, 16-18, 26-28 are rejected under 35 U.S.C. 102(b) as being anticipated by Lebel et al. (U.S. 2002/0049480) or in the alternative claims 3-5 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lebel et al. (U.S. 2002/0049480), as applied to claims 1-2, 13-15, 23-25 and 32 above.

In regards to claims 3-5, Lebel et al. teaches of the transporting of signals that contain protocol that insure proper transmission (see for example paragraph 158), data usage protocol for proper usage of data (see for example paragraphs 202, 227 and 298). Examiner takes the position that the teachings of Lebel et al. are inherently capable of performing the limitations of claims 3-5 since at least one protocol is necessarily needed to carry out the transmission of data, and thus the teachings of Lebel et al. anticipate the limitations of claims 3-5.

Or in the alternative, Examiner takes the position that it would have been obvious to one having ordinary skill in the art at the time of the invention to modify the teachings of Lebel et al. to include various types of standard protocol as claimed by Applicant,

since these types of protocol are standard and well known in the art, as these teachings are admitted prior art by Applicant (see Applicant's Specification paragraph 29).

In regards to claims 16-18, 26-28, Examiner takes the position that Lebel et al. anticipates the limitations of these claims or teaches obvious modifications, for reasons similar to the rejections of claims 3-5.

Claim Rejections - 35 USC § 103

7. Claims 6-12, 19-22, 29-31 rejected under 35 U.S.C. 103(a) as being unpatentable over Lebel et al. (U.S. 2002/0049480) as applied to claims 1-2, 13-15, 23-25 and 32 above, and further in view of Lee (U.S. 2001/0031997) as discussed in the previous Office Action of November 17, 2005.

In regards to claims 6-7, 12, 19, 22 and 29 the Lee reference teaches that the interface medical device (116) could be placed outside the patient, which Examiner interprets to also mean that that interface medical device could alternatively be placed inside the patient (see for example paragraph 28), in a position similar to the implanted medical device (112), which are both part of an implantable medical device network system (110). Examiner further takes the position that it would have been obvious to one having ordinary skill in the art to modify the system as taught by Lebel et al. to include in each packet information regarding network routing information and to combine these teachings into a single implanted device, for enhancing data transmission and accessibility, and for increasing implantation feasibility.

In regards to claims 8-9, 20-21, 30-31, Examiner takes the position that it would have also been obvious to one having ordinary skill in the art at the time of the invention

to further modify the teachings of Lebel et al. to include network routing information that corresponds to various types of standard protocol as claimed by Applicant, since these types of protocol are standard and well known in the art, as these teachings are admitted prior art by Applicant (see Applicant's Specification paragraph 33).

In regards to claims 10-11, Examiner takes the position that is well known in the art to have data transmitted with a higher priority than other data as deemed necessary; thus it would have been obvious to one having ordinary skill in the art to modify the teachings of Lebel et al. to include priority data transmitted prior to data with less priority, as it is commonly known in the art for enhancing the effectiveness of diagnosis and treatment of a patients.

8. Claims 33-39 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lebel et al. (U.S. 2002/0049480) as applied to claims 1-2, 13-15, 23-25 and 32 above, in view of Nappholz et al. (U.S. Patent No. 5,720,770).

In regards to claims 33-34, 36-37, Lebel et al. teaches of transmitting data from an implantable stimulation device to an external database (32); however Lebel et al. does not specifically teach of the use of repeater for transmitting data between an implanted device and a data network.

Nappholz et al. teaches of a cardiac stimulation system that comprises transferring data between a data network and an implantable pulse generator (see for example col. 2 lines 46-52), a wired connection between the data network and a repeater (see for example col. 2 lines 66-67, col. 4 lines 9-16 and the Abstract), and a wireless connection between the repeater and the implantable pulse generator (see for

example col. 4 lines 6-9). Examiner takes the position that the Nappholz et al. reference inherently teaches of the ability to establish a first transport layer between the data network and the repeater and a second transport layer connection between the repeater implantable pulse generator, since this would be required for the transmission of data over both a wired connection and wireless connection respectively. Further, it is inherent in the system as taught by Nappholz et al. that the system is capable of sending data with first transport control header information from the data network to the repeater and further sending the data with second transport control header information from the repeater to the implantable pulse generator.

It would have been obvious to one having ordinary skill in the art at the time of the invention to modify the system as taught by Lebel et al. to include the teachings of Nappholz et al. Lebel et al. and Nappholz et al. both teach of implantable medical devices that transmit data with an external device, and thus teach of analogous arts. It would have been obvious to one having ordinary skill in the art at the time of the invention to modify the system as taught by Lebel et al. to include a repeater for transmitting data between the implantable device and a data network, since it would increase the accessibility to patient data and the implantable device as taught by Nappholz et al. (see for example col. 4 lines 11-23 and col. 6 lines 64-67).

In regards to claim, 35 and 38-39, Examiner takes the position that it is inherent in the both the Lebel et al. and Nappholz et al. systems that a transport control protocol would be necessary to allow proper transmission of data, or in the alternative would an obvious modification to the Lebel et al. reference. Examiner further takes the position

that it would have been obvious to one having ordinary skill in the art at the time of the invention to provide a longer re-transmission timeout for the connection between the repeater and the implantable device, than for the data network and the repeater, since it is well known in the art that a transmission over a shorter distance (i.e. close proximity) requires less time than does a transmission over a longer distance (i.e. cellular connection).

Conclusion

9. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Lebel et al. (U.S. Patent No. 6,577,899), Sarwal et al. (U.S. Patent No. 6,662,052), Webb (U.S. 2002/0023654), Christopherson et al. (U.S. 2002/0045804).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Lenwood Faulcon, Jr. whose telephone number is 571-272-6090. The examiner can normally be reached on Monday-Thursday from 9 to 5 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Angela D. Sykes, can be reached on 571-272-4955. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only.

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For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Lenwood Faulcon, Jr.



George Manuel

Primary Examiner